

providing fresh dialysis fluid via a dialysis fluid inlet line of a dialysis fluid path to the dialysis fluid chamber and removing spent dialysis fluid from the dialyzer via a dialysis fluid drain line of the dialysis fluid path;

generating first pressure pulses in the dialysis fluid path during operation of the dialyzer; and

monitoring a waveform of second pressure pulses in the extracorporeal blood circulation path, induced by the first [through] pressure pulses generated in the dialysis fluid path so that a faulty vascular access is deduced when a characteristic change in the second pressure pulses waveform is detected.

Claim 2, line 1, after "wherein the" add --second--.

8. (Amended) An apparatus for dialysis treatment comprising:

a dialyzer subdivided by a semipermeable membrane into a blood chamber and a dialysis fluid chamber;

an extracorporeal blood circulation path including an arterial blood line and a venous blood line, the arterial blood line being connected to an inlet of a blood chamber, the venous blood line being connected to an outlet of the blood chamber;

a dialysis fluid path having a dialysis fluid inlet line and a dialysis fluid outlet line, the dialysis fluid inlet line being connected to an inlet of the dialysis fluid chamber, the dialysis fluid outlet line being connected to an outlet of the dialysis fluid chamber;

a pressure pulse generator disposed in the dialysis fluid path for generating first pressure pulses during operation of the dialyzer; and

a device for monitoring a vascular access during the dialysis treatment, the device including a pressure sensor and an analyzer unit, the pressure sensor for monitoring a pressure of the blood in the extracorporeal blood circulation path so as to be able to sense second pressure pulses induced by the first pressure pulses and for producing a corresponding signal, and the analyzer unit for monitoring the corresponding signal and for determining that the vascular access is faulty upon a characteristic change in [the] second pressure pulses waveform.